**Melanie Day**

**EDT 6000**

**SmartBoard Instructional Template**

**Topic of Unit/Lesson:** Math (Addition Facts)

**Student Profile:** Kindergarten students who have been introduced to the concept of addition and have had some previous practice and experience.

**Type of Computer-based instruction and Differentiated Strategies (for Multimedia instruction, only)** This lesson could be done in several ways. If a SmartBoard is not available but the software is on the computer, students could access the lesson and work independently possibly printing the page when they are done. With SmartBoard Technology available, the lessons could be used whole class or small group with student interaction. Because the nature of the lesson allows students to group the pictures themselves, they can create an addition sentence that makes sense to them.

**State Standards (Learning goals and objectives):** Students will be able to group objects, and create an addition sentence from their groupings that is an accurate representation of the groups formed

1(K)1.1.1.a. - Count sets of objects up to 20

**Content/Performance, Technology/ 21st Century Knowledge and Skills**

**Standard Statement M2**∗**:** Students will effectively communicate technological solutions by using Technology Education as an Interdisciplinary and Technological Link.

**Identify the Assessment Strategies:**

* **Self-Assessment for Students:** Students will self assess the formative/summative activity using the picture rubric.
* **Pre-assessment (Diagnostic/Formative):** During the interactive lesson the teacher will observe students as they group the animals in the picture and formulate their addition sentence. Students will each have a hand held white board to write their answers and teacher will select students at random to determine understanding.
* **Post-Assessment (Formative/Summative):** The summative assessment will be two parts. First, the teacher will give students a picture and ask them to create an addition sentence that goes with that picture. Students should be able to explain how they grouped the items in the picture. Secondly, students will draw a picture and generate an addition sentence to go with it. They will attempt, either through labeling or sentences to write a story to go with their picture and addition sentence that explains how they came up with their numbers.

**Summary of Topic/Main Idea/ Essential Questions**

Can students organize animals into similar groups and explain?

Are students able to write and solve addition problems up to 20?

**Identify instructional strategies and methods that will encourage learner participation.**

This would probably be a two or three day lesson. I would begin this lesson as a hands-on activity with students sorting and orally stating addition sentences to go with their sorted groups. I would observe students behaviors and strategies as they worked independently or in pairs. During this time I would continue to instruct and assist as needed. I would provide opportunities for students to share their work with the class using the document camera. After this I would move to the SmartBoard lesson. For many students, particularly younger students, you need to begin with a more concrete representation and work toward the more abstract. I would use the SmartBoard Activity as a whole group activity, allowing students the opportunity to participate. The final activity would be the product they would create in the form of their summative assessment where they will solve a problem given a set of pictures and also create a problem of their own and provide the solution.

**Reflection:** I was very surprised at the number of lessons that have already been created for the SmartBoard. Since this is a relatively new technology to many schools, and given the fact that it is very expensive, I didn’t expect there to be a large number of educators using them on a daily basis. I am excited to get on installed in my classroom and begin to use it with students in the future. I think that students are excited by technology and anything new adds to that excitement. The graphics for this lesson were colorful and engaging and that would also appeal to kindergarten students. I can definitely see myself using SmartBoard technology in my classroom as well as for presentations to my colleagues.

**Resources:** Computer, Internet, and Smart Technologies website

**References (APA citation)**

http://education.smarttech.com/ste/en-US/Ed+Resource/Lesson+Activities/Notebook+Activities/Browse+Notebook/United+States/Elementary/K-3/Math/Animal+Addition.htm